



# Case Study

## Ultramar Ltd.

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**Total Meter Services, Inc.**

**October 18<sup>th</sup>, 2007**

- ▶ Ultramar was investigating a solution to bring new efficiencies to their fleet fuelling operation. Ultramar need a solution that would allow the mechanical system they were using to meet with the forefront of technology. They were searching for one company that would provide full turn-key solutions to facilitate the building of state of the art loading racks and a Terminal Automation System to retrieve the all import business data that is captured at the plant.

# **TMS6000**

*Level II and Enterprise  
Solution*

*“Reliable. Now.”*



## Case Study – Ultramar Ltd.

### Summary

Ultramar was investigating a solution to bring new efficiencies to their fleet fueling operation. Ultramar needed a solution that would allow the mechanical system they were using to meet with the forefront of technology. They were searching for one company that would provide full turn-key solutions facilitate the building of state of the art loading racks and a Terminal Automation System to retrieve the all import business data that is captured at the plant. With the development of new sites and upgrading existing sites; Ultramar need a turn key solution to amalgamate all of their Ontario sites together as a whole.

### Customer Profile



Ultramar is the leading distributor of petroleum products in Quebec and the Maritimes, with a significant presence in Ontario, as well as the second largest refiner in Eastern Canada.

- 940 stations, 85 truck stop facilities and some 150,000 residential heating oil customers
- A leader in industrial and commercial sales
- One of the largest suppliers to resellers and independent distributors
- Head office located in Montreal
- One of the biggest employers in Eastern Canada, with a staff of over 3,700 employees and 10,000 indirect jobs



## **Business Problem**

### *Overview*

Ultramar operates a fleet fueling operation. Their trucks start the day by filling up at one of Ultramar's bulk plants. The daily workflow for the drivers entails filling up the delivery vehicle with fuel, following the dispatch schedule, and delivering fuel to various customers. The driver uses a mechanical ticket to record the delivered product. These were then handed off to the office to be deciphered and entered into their billing system. Each site has an individual regional office where employees would manually complete tank dips and call in the deliveries of product from the refineries.

### *Objectives*

Ultramar Ltd. wanted an affordable, automation system that remained user-friendly for the driver and assisted with the tracking and billing of their deliveries. The system needed to be customizable and economical. The solution was to enhance their business process already in place with cutting edge technology that would boost productivity and efficiency.

### *Choosing the right partner*

Ultramar approached Total Meter Services on the hopes of finding the right partner for this project. With TMS being at the forefront of automation technology and fabrication the decision was a natural one. After building Loading Racks for Ultramar and showing them how the DanLoad (an Electronic Preset) works in conjunction with the TMS6000 Automation software they knew that this was the perfect match for their Turn Key Solution needs.

## **Solution**

Total Meter Services installed the TMS6000 Level II software in 1997 at the Port Perry Bulk Plant. Once implemented and Ultramar seen how the system works first hand they decided to use TMS as their Turn Key Solution for the implementation of all sites using meters such as DanLoad's, Veeder Root EMR3 and LCR's. From fabricating the racks to automating the system TMS is currently running the TMS6000 Level II software in 17 sites in Ontario and running TMS6000 Level III in 6 additional sites in Quebec and the Maritimes. In 2003 TMS install an Enterprise



solution to allow the custom exporting of tickets to a main server and Ultramar's Back Office system SAP. The Enterprise software was installed at the TMS office which allowed the sites to backup all of the BOL and tank dips through a dial-up connection. This was completed by using the TMS6000 Ultramar Interface software which saved the information into a database and exported the ticket information to SAP. Since 1997, TMS helped Ultramar through the stages of technology by working with them to equip all the sites with TMSCOM Boxes, DSL High Speed Routers, Dell 2003 Servers, and move the Enterprise system to their head office. TMS is constantly supplying Ultramar with the latest technology and modifying their procedure and tickets so that they are up to municipal, provincial and state codes and standards.

## **Solving the problem**

TMS provided a solution by eliminating the mechanical process in all of the sites in Ontario. With the TMS6000 system installed at each site, Ultramar was able to eliminate the regional offices and move everything into a corporate office in Ottawa. The TMS software solution allowed the sites to be unmanned with automatic tank gauges and data transfer. This helped the business process by eliminating human error and lost tickets. Drivers are now only loading product, and all business procedures are maintained by remotely accessing each site through an integrated website. When the Enterprise solution was introduced Ultramar had to work together with TMS to recreate all the sites databases and amalgamate all the information together. With this process being completed it allowed Ultramar to have access to all sites and to give their carriers the ability to access the Enterprise website to monitor the inventory records.

## **The Technology**

The technology used has changed with the times. TMS6000 has used Windows infrastructure Desktop such as 95, NT, 2000, XP and currently using 2003 Server. The reporting and administrative management of the system is carried out through web-based application that facilitates that ability to view and manage the system from any desktop or laptop PC with live internet access.

## **Key components**

### **Software**

- TMS6000 Level II
- TMS6000 Enterprise
- TMS6000 Ultramar Interface

### **Hardware**

- TMSCOM Box
- LCR
- Veeder Root EMR3
- DanLoad
- AccuLoad

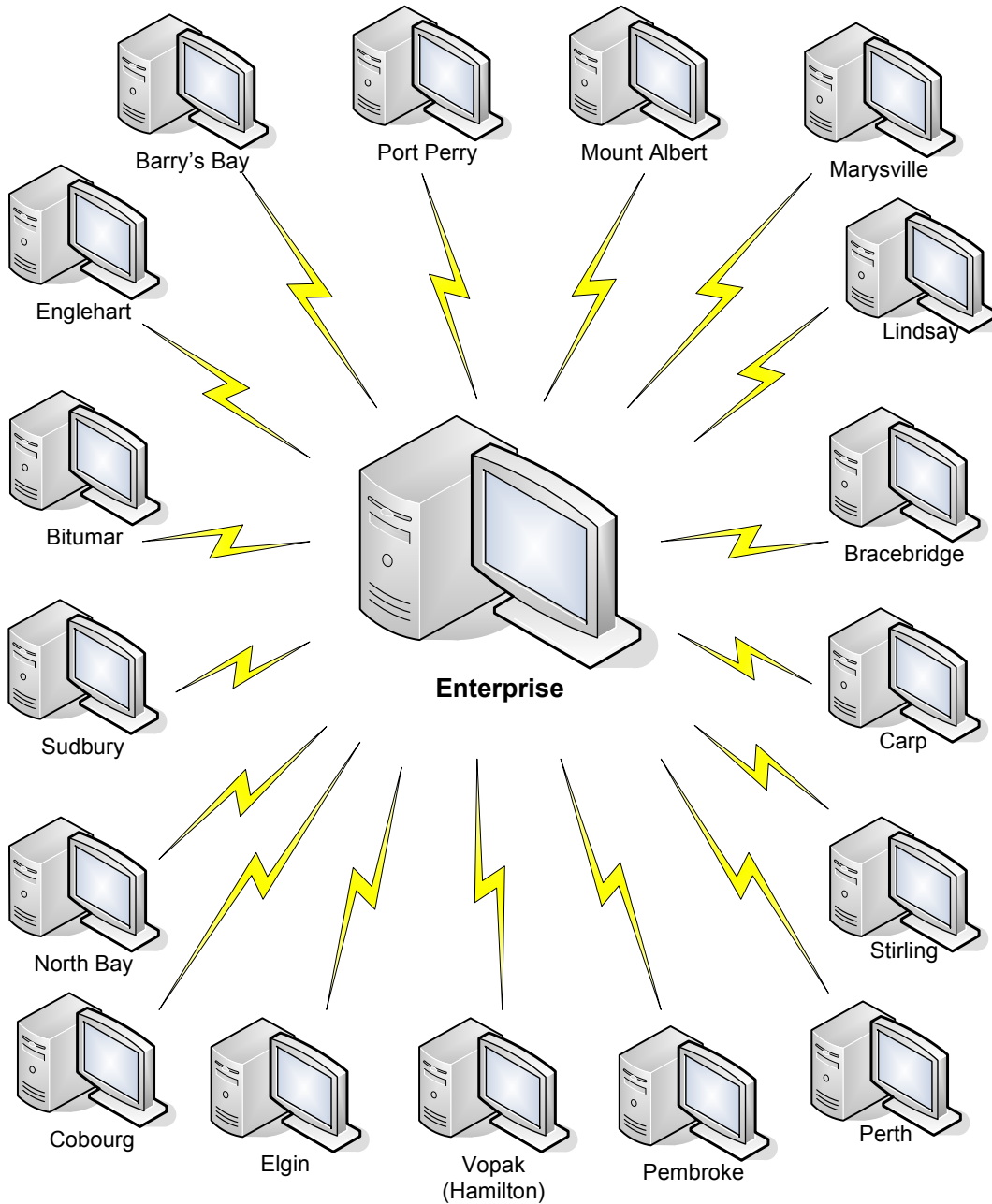


## **Lessons Learned**

TMS encountered a numerous of unique requirements while working with Ultramar that served to enhance the operations of the TMS6000 as well as develop the first Enterprise software solution. With the ability to customize to the needs of the customer the process ran smoothly with the help of planning and organizing all information before beginning the implementation. The TMS automation team and service department was able to overcome all obstacles and completed a successful Turn Key Solution implementation.



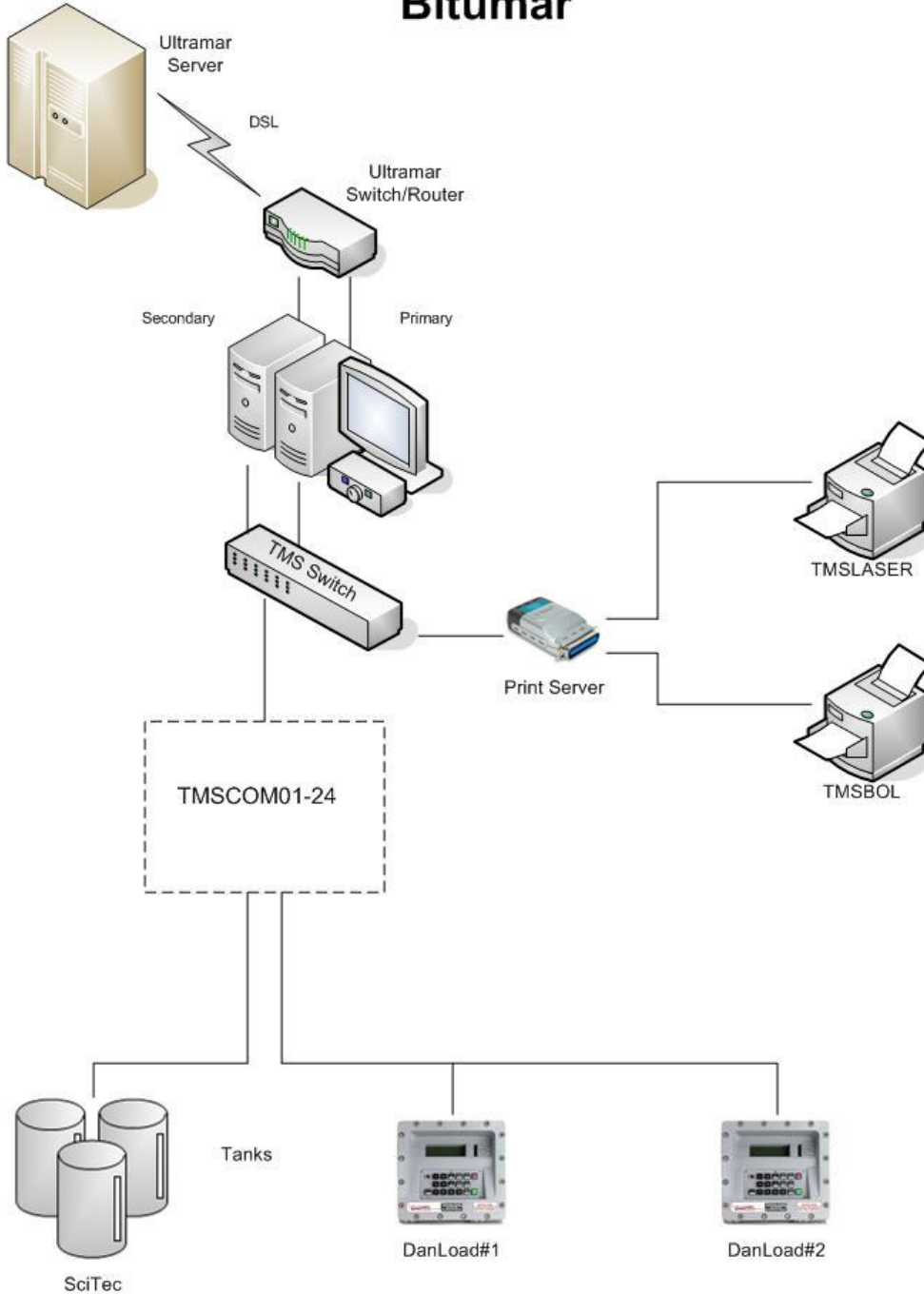
# TMS6000 Ultramar - Enterprise



<b>TOTAL METER SERVICES INC.</b> 150 CREDITSTONE ROAD VAUGHAN ONTARIO CANADA L4K 1P2 PHONE: 905-669-7011 FAX: 905-669-7010	TITLE	Ultramar - Enterprise	DATE	2007-10-18 MG
	DESCRIPTION		DWG	TMS000166.vsd



# TMS6000 Bitumar



<b>TOTAL METER SERVICES INC.</b> 150 CREDITSTONE ROAD VAUGHAN ONTARIO CANADA L4K 1P2 PHONE: 905-669-7011 FAX: 905-669-7010	TITLE	TMSCOM01-24 / Ultramar - Bitumar	DATE	2006-05-03
	DESCRIPTION	Network Diagram	DWG	Ultramar-Bitumar.vsd